

# Regional Water Quality Control Board

## SANTA ANA REGION (8)



### SECTION 303 (d) LIST PROPOSALS

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## Region 8: Anaheim Bay

### Metals and Pesticides

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<b>Water Body</b>	Anaheim Bay
<b>Stressor/Media/Beneficial Use</b>	Metals and organics/Tissue and Water/Fish Consumption, Human Health
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by CFCP, County.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	MTRLs from CFCP. WQOs for bacteria.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	Reviewed data from Coastal Fish Contamination Program (CFCP), Orange County PFRD. No exceedances for metals, endosulfans, 4 exceedances for pesticides. Concern was raised by RWQCB staff that because sample sizes are so small that these measurements do not represent water quality conditions in the Bay. While summarized in the record the actual data cannot be assessed to determine the spatial or temporal representation of the data.
<b>Spatial representation</b>	Targeted in waterbody. Locations unknown. The observations are few in number and, in this specific situation, the number of samples do not represent Bay conditions.
<b>Temporal representation</b>	1997-2001.
<b>Data type</b>	MTRLs, WQOs are numeric.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	More monitoring needed. Water Quality assessment underway.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited insufficient spatial and temporal coverage.</li> <li>3. Water quality standard used is applicable.</li> <li>4. The evaluation guideline used to interpret narrative water quality standards is adequate.</li> <li>5. Standard methods were used.</li> <li>6. Other water body- or site-specific information including the age of the data were considered.</li> </ol> <p>An inadequate number of the water quality measurements exceeded the</p>

## Region 8: Anaheim Bay

### Metals and Pesticides

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water quality standard. The staff confidence that standards were exceeded is low.

## Region 8: Bolsa Chica

### Metals

<b>Water Body</b>	Bolsa Chica
<b>Stressor/Media/Beneficial Use</b>	Metals/Water/MAR, EST, REC-1
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used for metals analyses by county.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	WQOs for metals.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	Not enough information is available.
<b>Data used to assess water quality</b>	<p>Orange County PFRD data for metals. For this assessment, it cannot be determined if standards are attained.</p> <p>Cadmium: 4 samples with 0 exceeding standards.  Chromium: 4 samples with 0 exceeding standards.  Copper: 4 samples with 4 exceeding standards.  Lead: 4 samples with 0 exceeding standards.  Nickel: 4 samples with 4 exceeding standards.  Zinc: 4 samples with 0 exceeding standards.</p> <p>Concern was raised by RWQCB staff that because sample sizes are so small that these measurements do not represent water quality conditions in Bolsa Chica. While summarized in the record the actual data cannot be assessed to determine the spatial or temporal representation of the data.</p> <p>Bolsa Chica State Beach Life Guard Station posted one time in three years. Other Bolsa Chica beaches not posted in the last three years.</p>
<b>Spatial representation</b>	Unknown.
<b>Temporal representation</b>	Unknown.
<b>Data type</b>	Data values are numeric.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	More monitoring needed.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited insufficient spatial and temporal coverage.</li> </ol>

## Region 8: Bolsa Chica Metals

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- 3. Water quality standards are applicable.
- 4. Data are numerical.
- 5. Standard methods were used.

An inadequate amount of water quality measurements are available to determine if water quality standards are exceeded.

## Region 8: Buck Gully Creek

### Total and Fecal coliform

<b>Water Body</b>	Buck Gully Creek
<b>Stressor/Media/Beneficial Use</b>	Total and Fecal coliform/Water/Beneficial uses not established in the Basin Plan for this water body but there are existing REC-1 and REC-2 beneficial uses downstream of Pacific Coast Highway.
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county health agency.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	No water quality standards established in the Basin Plan specifically for this water body. The guideline used by the RWQCB is appropriate for this type of water body.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical guidelines or standards established for other water bodies.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	Violations of fecal coliform in 18/56 samples for guidelines related to REC-2 and 13/56 samples for guidelines related to REC-1.
<b>Spatial representation</b>	All samples collected from creek, unknown number of sites, 239 samples
<b>Temporal representation</b>	Data were collected between 1997 and 2001.
<b>Data type</b>	Numerical data.
<b>Use of standard method</b>	Standard bacteriological methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	List for total and fecal coliform.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because an existing beneficial use is impacted and a pollutant contributes to or causes the problem. The water body should be listed for total and fecal coliform on the portion of the Creek downstream of Pacific Coast Highway.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited sufficient temporal coverage.</li> <li>3. Beneficial uses have not been established but there is an existing use downstream of Pacific Coast Highway.</li> <li>4. The evaluation guideline is adequate.</li> <li>5. Data are numerical.</li> <li>6. Standard methods were used.</li> <li>7. Other water body- or site-specific information including the age of the data were considered.</li> </ol>

## Region 8: Buck Gully Creek

### Total and Fecal coliform

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An adequate number of the water quality measurements showed impacts on an existing beneficial use. The staff confidence is high.



## Region 8: Canyon Lake-East Bay

### Sediment

<b>Water Body</b>	Canyon Lake-East Bay
<b>Stressor/Media/Beneficial Use</b>	Sediment/sediment/WARM/REC-1, REC-2
<b>Data quality assessment. Extent to which data quality requirements met.</b>	Suitt and Assoc. Report :QA used only for 1986 data, using standard geological methods for estimating water depth and sediment depth. 1997 information collected by non-standard method (fishfinder used by local resident) with no QA. UC Riverside 2nd Quarterly Report, 2001: QA used.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	Unknown.
<b>Utility of measure for judging if standards or uses are not attained</b>	Unknown.
<b>Water Body-specific Information</b>	Water depth, water elevation and lake bottom elevation data collected in 1986. Water depth collected in 1997. Sediment traps used in 2001 study by UCR.
<b>Data used to assess water quality</b>	Unknown for data reported in Suitt and Assoc., due to use of non-standard method for collecting data used to estimate sediment accumulation. Sediment trap results from UCR 2001 quarterly report provide more quantitative information.
<b>Spatial representation</b>	5 sample locations.
<b>Temporal representation</b>	Calculations from Suitt and Assoc. 1986 and 1997. Study by UC Riverside in 2001.
<b>Data type</b>	Estimates of sedimentation rate.
<b>Use of standard method</b>	Suitt and Assoc. report: 1986 data only. UCR Report: quantitative sedimentation rates.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	Unknown.
<b>RWQCB Recommendation</b>	List for impairment of REC-1, REC-2, and WARM beneficial uses.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited sufficient spatial and temporal coverage.</li> <li>3. Water quality standard used is applicable.</li> <li>4. The evaluation guideline used to interpret narrative water quality standards is adequate.</li> <li>5. Data are numerical.</li> <li>6. Non-standard methods were used.</li> </ol>

## Region 8: Canyon Lake-East Bay

### Sediment

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An adequate amount of the water quality measurements shows that the water quality standard is not exceeded.

Do not list for sedimentation. More recent data from UCR 2001 study indicates sedimentation rates not as large as estimated by earlier study. UCR analysis indicates that algae are the largest source of particulates. Canyon Lake is already listed for nutrients and studies for TMDL are underway.

## Region 8: Chino Creek, Reach 1 and Reach 2

### Metals

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<b>Water Body</b>	Chino Creek, Reach 1 and Reach 2
<b>Stressor/Media/Beneficial Use</b>	Metals/Water/REC-1, REC-2, WARM, WILD
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	WQOs.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	Insufficient data to make a determination.
<b>Data used to assess water quality</b>	Reviewed water quality data from Orange County Water District. There was insufficient data to make a determination that standards were exceeded. Of the 6 measurements of arsenic, copper, lead, and nickel, none exceeded any numerical standard.
<b>Spatial representation</b>	Insufficient data to make a determination.
<b>Temporal representation</b>	1997-2001.
<b>Data type</b>	Data are numeric values.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	Insufficient data to make a determination. More monitoring needed.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited insufficient spatial and temporal coverage.</li> <li>3. Water quality standards are applicable.</li> <li>4. Data are numerical.</li> <li>5. Standard methods were used.</li> </ol> <p>An inadequate amount of water quality measurements are available to determine if water quality standards are exceeded.</p>

## Region 8: Cucamonga Creek, Mountain Reach

### Metals

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<b>Water Body</b>	Cucamonga Creek, Mountain Reach
<b>Stressor/Media/Beneficial Use</b>	Metals/Water/MUN, REC-1, REC-2, WILD, COLD
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	WQOs.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly
<b>Water Body-specific Information</b>	Insufficient data to make a determination.
<b>Data used to assess water quality</b>	Reviewed water quality data from Orange County Water District. There were insufficient data to make a determination of water quality standards attainment. There were single measurements of cadmium, copper, lead, nickel, selenium, and zinc. No standards were exceeded in any of these measurements.
<b>Spatial representation</b>	Insufficient data to make a determination.
<b>Temporal representation</b>	1997-2001.
<b>Data type</b>	Data are numeric values.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	Insufficient data to make a determination. More monitoring needed.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited insufficient spatial and temporal coverage.</li> <li>3. Water quality standards are applicable.</li> <li>4. Data are numerical.</li> <li>5. Standard methods were used.</li> </ol> <p>An inadequate amount of water quality measurements are available to determine if water quality standards are exceeded.</p>

## Region 8: Huntington Beach at Magnolia Street

### Enterococcus

<b>Water Body</b>	Huntington Beach at Magnolia Street
<b>Stressor/Media/Beneficial Use</b>	Enterococcus/Water/REC-1
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county health agency.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	Exceedances of single sample AB 411 standards may result in beach postings by Orange Count Health Care Agency. Bacterial water quality standards are linked to REC-1 beneficial use attainment.
<b>Utility of measure for judging if standards or uses are not attained</b>	Data can be compared directly to standards.
<b>Water Body-specific Information</b>	Data age = 1-4 Years. Data were collected during both wet and dry seasons.
<b>Data used to assess water quality</b>	109 samples exceeded standard out of a total of 712 samples.
<b>Spatial representation</b>	1 station. Sampling location represents 50 yards on either side of the sampling location.
<b>Temporal representation</b>	Data were collected between 1999 and August 2002.
<b>Data type</b>	Numerical data.
<b>Use of standard method</b>	Standard bacteriological methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	List for enterococcus.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited sufficient spatial and temporal coverage.</li> <li>3. Beneficial uses apply to the water body.</li> <li>4. Water quality standard used is applicable.</li> <li>5. Data are numerical.</li> <li>6. Standard methods were used.</li> <li>7. Other water body- or site-specific information including season and the age of the data were considered.</li> </ol> <p>An adequate number of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>

## Region 8: Huntington Harbour

### Metals and pesticides

<b>Water Body</b>	Huntington Harbour
<b>Stressor/Media/Beneficial Use</b>	Metals and pesticides/Water and Tissue/Fish consumption
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county, Mussel Watch.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	MTRLs, WQOs.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical guideline directly.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	<p>Reviewed the Orange County PFRD and State Mussel Watch Program.</p> <p>For this type of assessment, it cannot be determined if standards are attained. No exceedances for SMW data except dieldrin. Huntington Harbor already listed for pesticides. There were 4 measurements each of cadmium, chromium, copper, lead, nickel, and zinc. None of these measurements exceeded applicable standards except nickel. The sample size was considered by RWQCB staff to be too small to be representative of water quality conditions in the Harbour.</p>
<b>Spatial representation</b>	Targeted in waterbody.
<b>Temporal representation</b>	Data were collected between 1997 and 2001.
<b>Data type</b>	MTRLs, WQOs are numeric.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	More monitoring needed.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited insufficient spatial coverage.</li> <li>3. Water quality standards are applicable.</li> <li>4. Data are numerical.</li> <li>5. Standard methods were used.</li> </ol> <p>An inadequate amount of water quality measurements are available to determine if water quality standards are exceeded.</p>

## Region 8: Huntington Harbour

### Caulerpa taxifolia

<b>Water Body</b>	Huntington Harbour
<b>Stressor/Media/Beneficial Use</b>	Caulerpa taxifolia (an invasive marine algae)/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	The information used to develop this listing is taken from two summary documents developed by the National Marine Fisheries Service.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	The Basin Plan contains narrative water quality objectives for the protection of bay and estuarine communities and populations of vertebrate, invertebrate, and plant species.
<b>Utility of measure for judging if standards or uses are not attained</b>	In areas where the Caulerpa has become well established, it has caused ecological and economic devastation by overgrowing and eliminating native seaweeds, seagrasses, and other communities. In the Mediterranean, it is reported to have harmed tourism and pleasure boating, devastated recreational diving, and had a costly impact on commercial fishing both by altering the distribution of fish as well as creating a considerable impediment to net fisheries. The dense carpet that this species can form on the bottom could inhibit the establishment of juveniles of many reef species, and its establishment offshore could seriously impact sport and commercial fisheries and navigation through quarantine restrictions to prevent the spread of this species.
<b>Water Body-specific Information</b>	This algae poses a substantial threat to marine ecosystems to Southern California, particularly to the extensive eelgrass meadows and other benthic environments that make coastal waters such a rich and productive environment for fish and birds. The eelgrass beds and other coastal resources that could be directly impacted by an invasion of Caulerpa are part of a food web that is critical to the survival of numerous native marine species including the commercially and recreationally important spiny lobster, California halibut, and sand basses.
<b>Data used to assess water quality</b>	The discovery of this species in southern California, recently reported in the journal Nature to be genetically identical to the strain in the Mediterranean, confirms that it nevertheless continues to invade marine ecosystems, such as the ecologically rich eelgrass beds that thrive in many of our coastal lagoons. It is likely that the algae was released from an aquarium at the locations in California where it has been discovered, a practice banned under California law. As of September 24, 2001 when Governor Gray Davis signed into law Assembly Bill 1334, it is now unlawful to sell, import, transport, transfer, or possess C. taxifolia and a number of look-alike species and other invasive Caulerpa species.
<b>Spatial representation</b>	The infestation of Huntington Harbour and Agua Hedionda are the first know infestations along the Pacific Coast of North America.
<b>Temporal representation</b>	Caulerpa was found in Huntington Harbour in August 2000. It is probable that Caulerpa has been present since 1996.
<b>Data type</b>	The information used was not numerical.
<b>Use of standard method</b>	N/A

Region 8: Huntington Harbour

Caulerpa taxifolia

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Potential Source(s) of Pollutant	It is likely that the algae was released from an aquarium near the Harbour. This practice is now banned by State law (AB 1334 (2001)).
Alternative Enforceable Program	RWQCB staff is coordinating efforts to define the spatial extent of the infestation, working with other agencies and interested parties to confine the infestation, examining available technologies for Caulerpa removal potential and educating the public as to its source and impact to the harbor.
RWQCB Recommendation	Use existing activities to prevent and eradicate Caulerpa taxifolia.
SWRCB Staff Recommendation	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because a pollutant does not contribute to or causes the problem.



## Region 8: Lake Forest

### Temperature, clarity, and dissolved oxygen

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<b>Water Body</b>	Lake Forest
<b>Stressor/Media/Beneficial Use</b>	Temperature, clarity, and dissolved oxygen/Water/There are existing aquatic life beneficial uses.
<b>Data quality assessment. Extent to which data quality requirements met.</b>	The information provided for this water body was narrative descriptions of the types of water quality factors that can impact water quality (such as water clarity, aquatic vegetation growth, and fish kills.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	No water quality standards are established for this water body.
<b>Utility of measure for judging if standards or uses are not attained</b>	No measurements or observations were provided.
<b>Water Body-specific Information</b>	A description of the Lake and the characteristics of the Lake that could be influenced by runoff or other sources of pollutants is provided.
<b>Data used to assess water quality</b>	No data or visual observations from the Lake were provided. The information provided is a descriptive summary of the characteristics
<b>Spatial representation</b>	No water quality measurements provided.
<b>Temporal representation</b>	No water quality measurements provided.
<b>Data type</b>	Non-numerical information.
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	Runoff.
<b>Alternative Enforceable Program</b>	
<b>RWQCB Recommendation</b>	Basin Plan water quality objectives are met. Do not list.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. No data were provided that indicate standards are not met or existing beneficial uses are impacted.

## Region 8: Little Corona Beach

### Bacteria

Water Body	Little Corona Beach																									
Stressor/Media/Beneficial Use	Bacteria/Water/MUN, REC-1, REC-2																									
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency.																									
Linkage between measurement endpoint and benefical use or standard	3 WQOs for total coliform (MUN) and fecal coliform (REC-1, REC-2).																									
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical AB 411 standards directly.																									
Water Body-specific Information																										
Data used to assess water quality	<p>The following is a summary of the single sample exceedances for total coliform, fecal coliform, and enterococcus.</p> <table><tr><td></td><td colspan="4">Measurements exceeding/total measurements</td></tr><tr><td>Year</td><td>1999</td><td>2000</td><td>2001</td><td>2002</td></tr><tr><td>Total</td><td>0/40</td><td>0/40</td><td>1/53</td><td>2/33</td></tr><tr><td>Fecal</td><td>1/40</td><td>1/40</td><td>1/53</td><td>2/33</td></tr><tr><td>Enterococcus</td><td>3/40</td><td>3/40</td><td>6/53</td><td>4/33</td></tr></table>		Measurements exceeding/total measurements				Year	1999	2000	2001	2002	Total	0/40	0/40	1/53	2/33	Fecal	1/40	1/40	1/53	2/33	Enterococcus	3/40	3/40	6/53	4/33
	Measurements exceeding/total measurements																									
Year	1999	2000	2001	2002																						
Total	0/40	0/40	1/53	2/33																						
Fecal	1/40	1/40	1/53	2/33																						
Enterococcus	3/40	3/40	6/53	4/33																						
Spatial representation	One site.																									
Temporal representation	Data were collected between 10/27/1999 and 7/4/2001.																									
Data type	3 WQOs for total coliform, fecal coliform, and enterococcus for MUN, REC-1, REC-2																									
Use of standard method	Standard bacteriological methods.																									
Potential Source(s) of Pollutant	Unknown.																									
Alternative Enforceable Program	None.																									
RWQCB Recommendation	Insufficient data to make a determination. Place on high priority for monitoring.																									
SWRCB Staff Recommendation	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded. The water body will be removed from the Monitoring List.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The data is considered to be of adequate quality.</li><li>2. The data exhibited sufficient spatial and temporal coverage.</li><li>3. Beneficial uses apply to the water body.</li><li>4. Water quality standard used is applicable.</li><li>5. Data are numerical.</li><li>6. Standard methods were used.</li></ol> <p>An adequate number of the water quality measurements exceeded the water</p>																									

## Region 8: Little Corona Beach

### Bacteria

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quality standard. The staff confidence that standards were exceeded is extremely moderate.

## Region 8: Los Trancos Creek

### Total and Fecal coliform

<b>Water Body</b>	Los Trancos Creek
<b>Stressor/Media/Beneficial Use</b>	Total and Fecal coliform/Water/Beneficial uses not established in the Basin Plan for this water body but there are existing REC-1 and REC-2 beneficial uses downstream of Pacific Coast Highway.
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county health agency.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	No water quality standards established in the Basin Plan specifically for this water body. The guideline used by the RWQCB is appropriate for this type of water body.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical guidelines or standards established for other water bodies.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	Over 450 violations of guidelines for total and fecal coliform.
<b>Spatial representation</b>	All samples collected from creek, at least 4 sample sites, approximately 500 samples.
<b>Temporal representation</b>	The data were collected between 1997 and 2001.
<b>Data type</b>	Numerical data.
<b>Use of standard method</b>	Standard bacteriological methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	The Irvine Company is committed to diverting dry weather flows of the Creek. The problem is likely to only exist during the wet season.
<b>RWQCB Recommendation</b>	List for total and fecal coliform.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because an existing beneficial use is impacted and a pollutant contributes to or causes the problem. List for total and fecal coliform on the portion of the Creek downstream of Pacific Coast Highway during the wet season.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited sufficient spatial and temporal coverage.</li> <li>3. Beneficial uses have not been established for the water body but there is an existing beneficial use downstream of the Pacific Coast Highway .</li> <li>4. A water quality standard is not established.</li> <li>5. The evaluation guideline used is adequate.</li> <li>6. Data are numerical.</li> <li>7. Standard methods were used.</li> <li>8. Other water body- or site-specific information including the season and</li> </ol>

## Region 8: Los Trancos Creek

### Total and Fecal coliform

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age of the data were considered.

Most of the water quality measurements indicate the beneficial use is impacted. The staff confidence is high.

## Region 8: Mill Creek (Prado Area)

### Metals

<b>Water Body</b>	Mill Creek (Prado Area)
<b>Stressor/Media/Beneficial Use</b>	Metals/Water/various beneficial uses
<b>Data quality assessment. Extent to which data quality requirements met.</b>	Reviewed water quality data from Orange County Water District. QA used by county.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	WQOs.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	
<b>Data used to assess water quality</b>	Antimony: 8 samples, with 0 exceeding. Copper: 8 samples with 0 exceeding. Mercury: 8 samples with 0 exceeding. Nickel: 8 samples with 0 exceeding.
<b>Spatial representation</b>	Insufficient data to make a determination.
<b>Temporal representation</b>	1997-2001.
<b>Data type</b>	Data are numeric values.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	
<b>RWQCB Recommendation</b>	Insufficient data to make a determination. More monitoring needed.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. The data is considered to be of adequate, inadequate quality.</li><li>2. The data exhibited insufficient spatial and temporal coverage.</li></ol> <p>An inadequate amount of the water quality measurements were available to assess if the water quality standard was exceeded.</p>

## Region 8: Muddy Creek

### Total and Fecal coliform

<b>Water Body</b>	Muddy Creek
<b>Stressor/Media/Beneficial Use</b>	Total and Fecal coliform/Water/Beneficial uses are not established in the Basin Plan for this water body.
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county health agency.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	No water quality objectives are established in the Basin Plan specifically for this water body.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical guidelines or standards established for other water bodies.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	77/110 samples exceeded the total coliform guideline related to MUN. 16/53 samples exceeded the fecal coliform guideline related to REC-2. 11/54 samples exceeded the fecal coliform guideline related to REC-1.
<b>Spatial representation</b>	Samples collected in creek or creek mouth.
<b>Temporal representation</b>	Data were collected between 1997 and 2001.
<b>Data type</b>	Numerical data.
<b>Use of standard method</b>	Standard bacteriological methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	List for total and fecal coliform.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there are no applicable beneficial uses and water quality standards. There is also no evidence of an existing beneficial use.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. Beneficial uses have not been established and do not apply to the water body.</li> <li>2. Water quality standards are not established.</li> </ol> <p>RWQCB should consider adoption of beneficial uses and water quality objectives for this water body.</p>

## Region 8: Newport Bay

### DDT, Mercury and endosulfans

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<b>Water Body</b>	Newport Bay
<b>Stressor/Media/Beneficial Use</b>	DDT, Mercury and endosulfans/tissue/Fish consumption
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by CFCP.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	MTRLs.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	Reviewed data from Coastal Fish Contamination Program. No exceedances for mercury, endosulfan. 11/19 fish tissue samples exceeded MTRL for DDT. Already listed for pesticides.
<b>Spatial representation</b>	5 sampling locations.
<b>Temporal representation</b>	1997-2001.
<b>Data type</b>	MTRLs are numeric.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	More monitoring needed.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body is already on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited sufficient spatial and temporal coverage.</li> <li>3. The evaluation guideline used to interpret narrative water quality standards is adequate.</li> <li>4. Data are numerical.</li> <li>5. Standard methods were used.</li> <li>6. Other water body- or site-specific information including the age of the data were considered.</li> </ol> <p>Most of the water quality measurements exceeded the water quality standard, but the water body is already listed for pesticides. The staff confidence that standards were exceeded is high.</p>



## Region 8: Newport Bay, Lower (was Lower Newport Bay)

### Fecal coliform

<b>Water Body</b>	Newport Bay, Lower (was Lower Newport Bay)
<b>Stressor/Media/Beneficial Use</b>	Fecal coliform/Water/MUN, REC-1, REC-2.
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	N/A
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination.</p> <p>This conclusion is based on the staff findings that the TMDL has been completed, has been incorporated into Basin Plan, and has been approved by USEPA.</p>

## Region 8: Newport Bay, Lower (was Lower Newport Bay)

### Siltation

<b>Water Body</b>	Newport Bay, Lower (was Lower Newport Bay)
<b>Stressor/Media/Beneficial Use</b>	Siltation/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	N/A
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination.</p> <p>This conclusion is based on the staff findings that the TMDL has been completed, has been incorporated into Basin Plan, and has been approved by USEPA.</p>

## Region 8: Newport Bay, Lower (was Lower Newport Bay)

### Priority Organics

<b>Water Body</b>	Newport Bay, Lower (was Lower Newport Bay)
<b>Stressor/Media/Beneficial Use</b>	Priority Organics/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	USEPA has approved a TMDL for this water body-pollutant combination.
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	None.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

## Region 8: Newport Bay, Lower (was Lower Newport Bay)

### Metals

<b>Water Body</b>	Newport Bay, Lower (was Lower Newport Bay)
<b>Stressor/Media/Beneficial Use</b>	Metals/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	USEPA has approved a TMDL for this water body-pollutant combination.
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	None.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

## Region 8: Newport Bay, Lower (was Lower Newport Bay)

### Nutrients

<b>Water Body</b>	Newport Bay, Lower (was Lower Newport Bay)
<b>Stressor/Media/Beneficial Use</b>	Nutrients/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	N/A
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination.</p> <p>This conclusion is based on the staff findings that the TMDL has been completed, has been incorporated into Basin Plan, and has been approved by USEPA.</p>

## Region 8: Newport Bay, Lower (was Lower Newport Bay)

### Pesticides

<b>Water Body</b>	Newport Bay, Lower (was Lower Newport Bay)
<b>Stressor/Media/Beneficial Use</b>	Pesticides/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	USEPA has approved a TMDL for this water body-pollutant combination.
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	None.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

## Region 8: Newport Bay, Upper (was Upper Newport Bay)

### Fecal coliform

<b>Water Body</b>	Newport Bay, Upper (was Upper Newport Bay)
<b>Stressor/Media/Beneficial Use</b>	Fecal coliform/Water/REC-1, REC-2
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	N/A
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.

## Region 8: Newport Bay, Upper (was Upper Newport Bay)

### Siltation

<b>Water Body</b>	Newport Bay, Upper (was Upper Newport Bay)
<b>Stressor/Media/Beneficial Use</b>	Siltation/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	N/A
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	Delist because TMDL has been incorporated into Basin Plan, and has been approved by USEPA.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.



## Region 8: Newport Bay, Upper (was Upper Newport Bay)

### Nutrients

<b>Water Body</b>	Newport Bay, Upper (was Upper Newport Bay)
<b>Stressor/Media/Beneficial Use</b>	Nutrients/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	N/A
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.

## Region 8: Newport Bay, Upper (was Upper Newport Bay)

### Trash

<b>Water Body</b>	Newport Bay, Upper (was Upper Newport Bay)								
<b>Stressor/Media/Beneficial Use</b>	Trash/Water/Human-related: REC-2; Aquatic Life: WILD, RARE, EST, MAR								
<b>Data quality assessment. Extent to which data quality requirements met.</b>	No quality assurance information was provided.								
<b>Linkage between measurement endpoint and beneficial use or standard</b>	The narrative water quality objectives to prevent solids from causing nuisance or adversely affecting beneficial uses.								
<b>Utility of measure for judging if standards or uses are not attained</b>	Photographs can indicate gross impacts on beneficial uses and whether standards have been exceeded. Measurements of the amounts of trash can provide a relative measure of the potential for nuisance.								
<b>Water Body-specific Information</b>	Photographs appear to be taken on at least one occasion.								
<b>Data used to assess water quality</b>	<p>Cleanup crews have documented trash in Newport Bay. Large amounts of trash were collected in Upper Newport Bay as follows:</p> <table> <tr> <th>Year</th><th>Amount (pounds)</th></tr> <tr> <td>1999</td><td>53,500</td></tr> <tr> <td>2000</td><td>46,500</td></tr> <tr> <td>2001</td><td>42,900</td></tr> </table> <p>Twelve photographs were submitted depicting several locations in Newport Bay with trash scattered in several intertidal locations. The trash included plastic bottles, styrofoam cups, paper wrappers, wood debris, aluminum cans, plastic pipes, personal floatation device, and other unidentifiable debris.</p>	Year	Amount (pounds)	1999	53,500	2000	46,500	2001	42,900
Year	Amount (pounds)								
1999	53,500								
2000	46,500								
2001	42,900								
<b>Spatial representation</b>	The photographs were taken at 11 locations in Upper Newport Bay. The locations cover a number of widely scattered stations.								
<b>Temporal representation</b>	It cannot be determined when the photographs were taken.								
<b>Data type</b>	The photographs are qualitative information. Data on trash collections from the Upper Newport Bay are numerical.								
<b>Use of standard method</b>	Documentation methods are not described.								
<b>Potential Source(s) of Pollutant</b>	Trash can enter the Bay from urban runoff or by being blown directly into the water body.								
<b>Alternative Enforceable Program</b>	The North/Central Orange County Areawide Urban Stormwater Runoff Permit, Order No. R8-2002-0010 issued to Orange County and its incorporated cities has enforceable provisions in place to address litter, debris and trash in this water body.								
<b>RWQCB Recommendation</b>	Use the provisions of the storm water permit to correct the trash problem in Upper Newport Bay.								
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB								

## Region 8: Newport Bay, Upper (was Upper Newport Bay)

### Trash

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documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.

This conclusion is based on the staff findings that:

1. The data is considered to be of unknown quality.
2. The data exhibited sufficient spatial and unknown temporal coverage.
3. Water quality standard used is applicable.
4. Data are both numerical and not numerical.
5. Cannot tell if standard methods were used.
6. Other water body- or site-specific information including the effects of season, storm events, and age of the data were not considered.

An inadequate amount of the measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.

## Region 8: Newport Bay, Upper Ecological Reserve (was Upper Newport Bay + Pesticides)

<b>Water Body</b>	Newport Bay, Upper Ecological Reserve (was Upper Newport Bay Ecological Reserve)
<b>Stressor/Media/Beneficial Use</b>	Pesticides/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	USEPA has approved a TMDL for this water body-pollutant combination.
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	None.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

## Region 8: Newport Bay, Upper Ecological Reserve (was Upper Newport Bay + Metals)

<b>Water Body</b>	Newport Bay, Upper Ecological Reserve (was Upper Newport Bay Ecological Reserve)
<b>Stressor/Media/Beneficial Use</b>	Metals/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	USEPA has approved a TMDL for this water body-pollutant combination.
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	None.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

## Region 8: Orange County Coastline

### Trash

<b>Water Body</b>	Orange County Coastline
<b>Stressor/Media/Beneficial Use</b>	Trash/Water/REC-2, Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	The sampling procedures, collection approach, data analysis, and estimation procedures are clearly described (Moore et al., 2000. Composition and distribution of beach debris in Orange County, California).
<b>Linkage between measurement endpoint and beneficial use or standard</b>	<p>The California Ocean Plan designates the beneficial uses of the ocean waters of the State that shall be protected including water contact and non-contact recreation, including aesthetic enjoyment and marine habitat. The California Ocean Plan has applicable narrative water quality objectives as follows:</p> <ul style="list-style-type: none"> <li>- Floating particulates and grease and oil shall not be visible.</li> <li>- The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.</li> <li>- The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.</li> </ul>
<b>Utility of measure for judging if standards or uses are not attained</b>	The measures used in the study were abundance of trash particles and the weight of trash along the coastline. These data were compared to California Coastal Cleanup Day collection data.
<b>Water Body-specific Information</b>	<p>Estimates were made of the percent of shoreline affected, types of habitat affected (sandy beach and rocky shore), Trash type (including plastics, cigarette butts, paper, wood metal glass rubber, pet and bird droppings, cloth, and other trash).</p> <p>Even though the study measured the amounts of trash on the beaches for the water's edge to the first pavement or rocky cliff, this listing only applies to the portion of the beach regularly in contact with ocean water.</p>
<b>Data used to assess water quality</b>	<p>Estimated total abundance of trash was 106 million items weighing 13 tons. Pre-production plastic pellets, foamed plastics and hard plastics made up 99% of the total abundance and 51% of the total weight. Cigarette butts were fourth in total abundance and accounted for less than 1% of the abundance and weight.</p> <p>Data collected by volunteers during the annual California Coastal Cleanup Day (1998) was 50 times lower than the data collected in the trash survey.</p> <p>Information contained in the fact sheets for Santa Ana River, Reach 1; Upper Newport Bay; and the San Gabriel River provide additional information. Trash carried down the Santa Ana River generally finds its way onto beaches in the cities of Huntington Beach and Newport Beach. After storms, 929 tons of trash and debris were collected in 1999 along Huntington Beach city beaches. During the same period, approximately</p>

## Region 8: Orange County Coastline

### Trash

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970 tons of trash and debris were collected on Newport Beach city beaches.

Cleanup crews have documented trash in Newport Bay. Large amounts of trash were collected in Upper Newport Bay as follows:

Year	Amount (pounds)
1999	53,500
2000	46,500
2001	42,900

Cleanup crews have documented trash removal on beaches near the mouth of the San Gabriel River as follows:

January-December 2001	572.43 tons
January-June 2002	16 tons

Based on the photographs of trash in the Santa Ana River, Newport Bay, and the San Gabriel River it is probable that some of the trash comes from water-related sources like urban runoff.

#### **Spatial representation**

Beach debris was surveyed and collected at 43 sites from Seal Beach to San Clemente on the Orange County coast. The data were collected using a stratified random design, stratified by shoreline type.

Each sample site was delineated as an area 25 yards in length and extending from the water's edge to the first pavement or rocky cliff.

The study assessed trash on beaches in both Region 8 and Region 9. The proposed listing is only for the water-associated portion of these beaches.

#### **Temporal representation**

Data were collected between August 2 and September 18, 1998.

#### **Data type**

Numerical data.

#### **Use of standard method**

See Quality Assurance section above. Data were collected using approaches from other debris studies outside the U.S.

#### **Potential Source(s) of Pollutant**

Four sources were identified: (1) littering by beachgoers, (2) wind currents from upland sources, (3) runoff from land-based activities, and (4) overboard disposal from boating activities (including accidental spills). The data suggest that water-based sources (runoff and overboard disposal) were more important than direct littering or wind.

#### **Alternative Enforceable Program**

The North/Central Orange County Areawide Urban Stormwater Runoff Permit, Order No. R8-2002-0010 issued to Orange County and its incorporated cities has enforceable provisions in place to address litter, debris and trash in this water body.

During FY 2001-02, twenty-two permittee municipalities installed catch basin filters, six installed catch basin inlet screens to prevent trash and debris from entering the storm drain system, and eight installed in-line treatment systems to remove trash/debris from the storm drain system. Over 1,500 tons of trash and debris were removed from county maintained booms. Regular street sweeping programs throughout Orange County reported removing over 41,000 tons of material during the last year, an

## Region 8: Orange County Coastline

### Trash

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increase of over 25% from the previous year.

The storm water permit addresses three of the four sources of trash identified above. Overboard disposal from boaters and shipping is beyond the scope of the program.

While significant progress is being made to address trash, it can not be determined when or if the currently installed best management practices will fully address the trash problem.

#### **RWQCB Recommendation**

None.

#### **SWRCB Staff Recommendation**

After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

This conclusion is based on the staff findings that:

1. The data is considered to be of adequate quality.
2. The data exhibited sufficient spatial and temporal coverage.
3. Beneficial uses apply.
4. Water quality standard used is applicable.
5. Data are numerical.
6. Standard methods were used.
7. Other water body- or site-specific information including the effects of different sources and age of the data were considered.

An adequate amount of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is moderate.



## Region 8: Pelican Hill Waterfall

### Total and Fecal coliform

<b>Water Body</b>	Pelican Hill Waterfall
<b>Stressor/Media/Beneficial Use</b>	Total and Fecal coliform/Water/beneficial uses are not established in the Basin Plan for this water body.
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county health agency.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	No water quality objectives are established in the Basin Plan specifically for this water body.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical guidelines directly.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	14/64 exceedances of fecal coliform WQO for REC-2. 208/220 exceedances of total coliform WQO. 11/56 exceedances of fecal coliform WQO for REC-1.
<b>Spatial representation</b>	Targeted in waterbody.
<b>Temporal representation</b>	Data were collected between 1997 and 2001.
<b>Data type</b>	Numerical data.
<b>Use of standard method</b>	Standard bacteriological methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	List for total and fecal coliform.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there are no applicable beneficial uses or water quality standards. There is no evidence in the record that there is an existing beneficial use. RWQCB should consider adoption of beneficial uses and water quality objectives for this water body.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. Beneficial uses have not been established and do not apply to the water body.</li> <li>2. Water quality standards have not been established.</li> </ol>

## Region 8: Pelican Point Creek

### Total and Fecal coliform

<b>Water Body</b>	Pelican Point Creek
<b>Stressor/Media/Beneficial Use</b>	Total and Fecal coliform/Water/Beneficial uses have not been established in the Basin Plan for this water body.
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county health agency.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	No water quality objectives are established in the Basin Plan specifically for this water body.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical guidelines directly.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	225/230 exceedances of total coliform guideline. 31/55 exceedances of fecal coliform guideline for REC-2. 48/56 exceedances of fecal coliform guideline for REC-1.
<b>Spatial representation</b>	Targeted in waterbody.
<b>Temporal representation</b>	Data collected between 1997 and 2001.
<b>Data type</b>	3 WQOs for total and fecal coliform for MUN, REC-1, REC-2.
<b>Use of standard method</b>	Standard bacteriological methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	List for total and fecal coliform.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there are no applicable beneficial uses or water quality standards. There is no evidence in the record that there is an existing beneficial use. RWQCB should consider adoption of beneficial uses and water quality objectives for this water body.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. Beneficial uses have not been established and do not apply to the water body.</li> <li>2. Water quality standards have not been established.</li> </ol>

## Region 8: Pelican Point Middle Creek

### Total and Fecal coliform

<b>Water Body</b>	Pelican Point Middle Creek
<b>Stressor/Media/Beneficial Use</b>	Total and Fecal coliform/Water/Beneficial uses are not established in the Basin Plan for this water body.
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county health agency.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	No water quality objectives are established in the Basin Plan specifically for this water body.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical guidelines directly.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	126/133 exceedances of total coliform guideline. 12/50 exceedances of fecal coliform WQO for REC-1 guideline. 11/50 exceedances of fecal coliform guideline for REC-2.
<b>Spatial representation</b>	Targeted in waterbody.
<b>Temporal representation</b>	Data were collected between 1997 and 2001.
<b>Data type</b>	Numerical data.
<b>Use of standard method</b>	Standard bacteriological methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	List for total and fecal coliform.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there are no applicable beneficial uses or water quality standards. There is no evidence in the record that there is an existing beneficial use. RWQCB should consider adoption of beneficial uses and water quality objectives for this water body.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. Beneficial uses have not been established and do not apply to the water body.</li> <li>2. Water quality standards have not been established.</li> </ol>

## Region 8: San Diego Creek, Reach 1

### Nutrients

<b>Water Body</b>	San Diego Creek, Reach 1
<b>Stressor/Media/Beneficial Use</b>	Nutrients/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	N/A
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.

## Region 8: San Diego Creek, Reach 1

### Siltation

<b>Water Body</b>	San Diego Creek, Reach 1
<b>Stressor/Media/Beneficial Use</b>	Siltation/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	N/A
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.

## Region 8: San Diego Creek, Reach 1

### Metals

<b>Water Body</b>	San Diego Creek, Reach 1
<b>Stressor/Media/Beneficial Use</b>	Metals/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	USEPA has approved a TMDL for this water body-pollutant combination.
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	None.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been established for this water body-pollutant combination by USEPA.

## Region 8: San Diego Creek, Reach 1

### Pesticides

<b>Water Body</b>	San Diego Creek, Reach 1
<b>Stressor/Media/Beneficial Use</b>	Pesticides/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	USEPA has approved a TMDL for this water body-pollutant combination.
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	None.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

## Region 8: San Diego Creek, Reach 1

### Fecal coliform

<b>Water Body</b>	San Diego Creek, Reach 1
<b>Stressor/Media/Beneficial Use</b>	Fecal coliform/Water/REC-1, REC-2
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county health agency.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	3 WQOs for total coliform (MUN) and fecal coliform (REC-1, REC-2).
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	22/22 exceedances of total and fecal coliform WQOs.
<b>Spatial representation</b>	Targeted in waterbody.
<b>Temporal representation</b>	1997-2001.
<b>Data type</b>	3 WQOs for total and fecal coliform for MUN, REC-1, REC-2
<b>Use of standard method</b>	Standard bacteriological methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	List for total and fecal coliform
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited sufficient spatial and temporal coverage.</li> <li>3. Beneficial uses apply to the water body.</li> <li>4. Water quality standard used is applicable.</li> <li>5. Data are numerical.</li> <li>6. Standard methods were used.</li> <li>7. Other water body- or site-specific information including the age of the data were considered.</li> </ol> <p>All of the water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high.</p>



## Region 8: San Diego Creek, Reach 2

### Metals

<b>Water Body</b>	San Diego Creek, Reach 2
<b>Stressor/Media/Beneficial Use</b>	Metals/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	USEPA has approved a TMDL for this water body-pollutant combination.
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	None.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the TMDLs Completed List because a plan to implement the TMDL has not been adopted or approved even though the TMDL has been approved by USEPA.

## Region 8: San Diego Creek, Reach 2

### Siltation

<b>Water Body</b>	San Diego Creek, Reach 2
<b>Stressor/Media/Beneficial Use</b>	Siltation/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	N/A
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.

## Region 8: San Diego Creek, Reach 2

### Nutrients

<b>Water Body</b>	San Diego Creek, Reach 2
<b>Stressor/Media/Beneficial Use</b>	Nutrients/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	N/A
<b>Linkage between measurement endpoint and beneficial use or standard</b>	N/A
<b>Utility of measure for judging if standards or uses are not attained</b>	N/A
<b>Water Body-specific Information</b>	N/A
<b>Data used to assess water quality</b>	N/A
<b>Spatial representation</b>	N/A
<b>Temporal representation</b>	N/A
<b>Data type</b>	N/A
<b>Use of standard method</b>	N/A
<b>Potential Source(s) of Pollutant</b>	N/A
<b>Alternative Enforceable Program</b>	N/A
<b>RWQCB Recommendation</b>	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the TMDLs Completed List because a TMDL has been developed for the water body-pollutant combination. The TMDL has been incorporated into Basin Plan and has been approved by USEPA.

## Region 8: San Jacinto River North Fork (Reach 7)

### Metals

<b>Water Body</b>	San Jacinto River North Fork (Reach 7)
<b>Stressor/Media/Beneficial Use</b>	Metals/Water/MUN
<b>Data quality assessment. Extent to which data quality requirements met.</b>	Reviewed water quality data from Lake Hemet Municipal Water District. QA used by water district.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	WQOs.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	
<b>Data used to assess water quality</b>	Aluminum: 4 samples with 1 exceeding MCL. Antimony: 4 samples with 0 exceeding MCL. Arsenic: 4 samples with 0 exceeding MCL. Barium: 4 samples with 0 exceeding MCL. Beryllium: 4 samples with 0 exceeding MCL. Cadmium: 4 samples with 0 exceeding MCL. Iron: 4 samples with 0 exceeding MCL.
<b>Spatial representation</b>	Insufficient data to make a determination.
<b>Temporal representation</b>	1997-2001.
<b>Data type</b>	Data are numeric values.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None
<b>RWQCB Recommendation</b>	Insufficient data to make a determination. More monitoring needed.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited insufficient spatial and temporal coverage.</li> <li>3. Water quality standard used is applicable.</li> </ol> <p>The staff confidence that standards were exceeded is low.</p>

## Region 8: San Jacinto River South Fork (Reach 7)

### Salinity, Total Dissolved Solids

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<b>Water Body</b>	San Jacinto River South Fork (Reach 7)
<b>Stressor/Media/Beneficial Use</b>	Salinity, Total Dissolved Solids/Water/MUN
<b>Data quality assessment. Extent to which data quality requirements met.</b>	Reviewed water quality data from Lake Hemet Municipal Water District. QA used by water district.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	WQOs.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	
<b>Data used to assess water quality</b>	Primary and secondary MCL: 4 samples with 0 exceeding. Sodium: 4 samples with 4 Basin Plan Objective. Sulfate: 4 samples with 0 exceeding BP Objective. Chloride: 4 samples with 3 exceeding BP Objective. TDS: 4 samples with 4 exceeding BP objective.
<b>Spatial representation</b>	Insufficient data to make a determination.
<b>Temporal representation</b>	1997-2001.
<b>Data type</b>	Data are numeric values.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	Insufficient data to make a determination. More monitoring needed.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited insufficient spatial and temporal coverage.</li> <li>3. Water quality standard used is applicable.</li> </ol> <p>The staff confidence that standards were exceeded is low.</p>

## Region 8: Santa Ana Delhi Channel

### Fecal coliform

<b>Water Body</b>	Santa Ana Delhi Channel
<b>Stressor/Media/Beneficial Use</b>	Fecal coliform/Water/Beneficial uses are not established in the basin Plan for this water body.
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county health agency.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	No water quality standards are established in the Basin Plan specifically for this water body.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical guidelines directly.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	11/11 exceedances of total coliform guidelines. 22/22 exceedances of total and fecal guidelines.
<b>Spatial representation</b>	Targeted in waterbody.
<b>Temporal representation</b>	Data collected between 1997 and 2001.
<b>Data type</b>	Numerical data.
<b>Use of standard method</b>	Standard bacteriological methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	List for total and fecal coliform.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because there are no applicable beneficial uses or water quality standards. There is no evidence in the record that there is an existing beneficial use. RWQCB should consider adoption of beneficial uses and water quality objectives for this water body.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"><li>1. Beneficial uses have not been established and do not apply to the water body.</li><li>2. Water quality standards have not been established.</li></ol>

## Region 8: Santa Ana River (Reaches 4 and 5)

### Metals

<b>Water Body</b>	Santa Ana River (Reaches 4 and 5)
<b>Stressor/Media/Beneficial Use</b>	Metals/Water/WARM, WILD, RARE
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	WQOs.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	Insufficient data to make a determination.
<b>Data used to assess water quality</b>	<p>Reviewed water quality data from Orange County Water District.</p> <p>Reach 4: Arsenic: 1 sample with 0 exceeding standard.  Reach 4: Copper: 1 sample with 0 exceeding standard.  Reach 4: Nickel: 1 sample with 0 exceeding standard.  Reach 5: Copper: 3 sample with 0 exceeding standard.  Reach 5: Lead: 1 sample with 0 exceeding standard.  Reach 5: Nickel: 1 sample with 0 exceeding standard.</p>
<b>Spatial representation</b>	Insufficient data to make a determination.
<b>Temporal representation</b>	1997-2001.
<b>Data type</b>	Data are numeric values.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	Insufficient data to make a determination. More monitoring needed.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited insufficient spatial and temporal coverage.</li> </ol>

## Region 8: Santa Ana River, Reach 1

### Trash

<b>Water Body</b>	Santa Ana River, Reach 1
<b>Stressor/Media/Beneficial Use</b>	Trash/Water/Human-related: REC-2; Aquatic Life: WARM, WILD, RARE
<b>Data quality assessment. Extent to which data quality requirements met.</b>	No quality assurance information was provided.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	The narrative water quality objectives to prevent floatables from causing nuisance or adversely affecting beneficial uses.
<b>Utility of measure for judging if standards or uses are not attained</b>	Photographs can indicate gross impacts on beneficial uses and whether standards have been exceeded. Measurements of the amounts of trash can provide a relative measure of the potential for nuisance.
<b>Water Body-specific Information</b>	Photographs appear to be taken on at least two occasions. The data for trash collection is for beaches in the cities of Newport Beach and Huntington Beach.
<b>Data used to assess water quality</b>	<p>Trash carried down the Santa Ana River generally finds its way onto beaches in the cities of Huntington Beach and Newport Beach. After storms, 929 tons of trash and debris were collected in 1999 along Huntington Beach city beaches. During the same period, approximately 970 tons of trash and debris were collected on Newport Beach city beaches.</p> <p>Fifteen photographs were submitted depicting several locations in along the Santa Ana River with trash scattered in several locations. The trash included plastic bottles, styrofoam and paper cups, paper wrappers, plastic bags, a shopping cart, and other unidentifiable debris.</p>
<b>Spatial representation</b>	The photographs were taken at seven locations along the Santa Ana River from McFadden to McArthur Blvd.
<b>Temporal representation</b>	The date the photographs were taken is unknown but it is apparent from the time stamp on some of the photographs that they were taken on two different days.
<b>Data type</b>	The photographs are qualitative information. Data on trash collections from the Newport Beach and Huntington Beach city beaches are numerical.
<b>Use of standard method</b>	Documentation methods are not described.
<b>Potential Source(s) of Pollutant</b>	Trash can enter the River from urban runoff or by being blown directly into the water body.
<b>Alternative Enforceable Program</b>	The North/Central Orange County Areawide Urban Stormwater Runoff Permit, Order No. R8-2002-0010 issued to Orange County and its incorporated cities has enforceable provisions in place to address litter, debris and trash in this water body.
<b>RWQCB Recommendation</b>	Use the provisions of the storm water permit to correct the trash problem in Upper Newport Bay.
<b>SWRCB Staff Recommendation</b>	After reviewing the available data and information and the RWQCB



## Region 8: Santa Ana River, Reach 1

### Trash

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documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.

This conclusion is based on the staff findings that:

1. The data is considered to be of unknown quality.
2. The data exhibited sufficient spatial and unknown temporal coverage.
3. Water quality standard used is applicable.
4. Data are both numerical and not numerical.
5. Cannot tell if standard methods were used.

An inadequate amount of the measurements exceeded the water quality standard. The staff confidence that standards were exceeded is low.

## Region 8: Santa Ana River, Reach 3

### Total Dissolved Solids

<b>Water Body</b>	Santa Ana River, Reach 3
<b>Stressor/Media/Beneficial Use</b>	Total Dissolved Solids/Water/MUN
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by Regional Board.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	WQO is 700 mg/L.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	17/18 samples did not exceed WQO (700 mg/L).
<b>Spatial representation</b>	Targeted in waterbody. Locations unknown.
<b>Temporal representation</b>	1997-2001.
<b>Data type</b>	Data values are numeric.
<b>Use of standard method</b>	Standard analytical methods used.
<b>Potential Source(s) of Pollutant</b>	None.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	Delist because recent data indicate WQO is being met.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited sufficient temporal coverage.</li> <li>3. Beneficial uses apply to the water body.</li> <li>4. Water quality standard used is applicable.</li> <li>5. Data are numerical.</li> <li>6. Standard methods were used.</li> <li>7. Other water body- or site-specific information including age of the data were considered.</li> </ol> <p>Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.</p>

## Region 8: Santa Ana River, Reach 3

### Nitrogen

<b>Water Body</b>	Santa Ana River, Reach 3
<b>Stressor/Media/Beneficial Use</b>	Nitrogen/Water/Aquatic Life
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by Regional Board.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	WQO is 10 mg/L.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	Data age = 1-4 Years.
<b>Data used to assess water quality</b>	54/55 samples did not exceed the WQO (10 mg/L).
<b>Spatial representation</b>	Targeted in waterbody.
<b>Temporal representation</b>	1997-2001.
<b>Data type</b>	Data values are numeric.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	None.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	Delist because recent data indicate WQO is being met.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should not be placed on the section 303(d) list because applicable water quality standards are not exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited sufficient temporal coverage.</li> <li>3. Beneficial uses apply to the water body.</li> <li>4. Water quality standard used is applicable.</li> <li>5. Data are numerical.</li> <li>6. Standard methods were used.</li> <li>7. Other water body- or site-specific information including age of the data were considered.</li> </ol> <p>Most of the water quality measurements did not exceed the water quality standard. The staff confidence that standards were not exceeded is high.</p>

## Region 8: Seal Beach, Projection of First Street

### Enterococcus

<b>Water Body</b>	Seal Beach, Projection of First Street
<b>Stressor/Media/Beneficial Use</b>	Enterococcus/Water/REC-1, REC-2
<b>Data quality assessment. Extent to which data quality requirements met.</b>	QA used by county health agency.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	Exceedances of single sample AB 411 standards may result in beach postings by Orange Count Health Care Agency. Bacterial water quality standards are linked to REC-1 beneficial use attainment.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	Data age = 1-4 Years. Data were collected during both wet and dry seasons.
<b>Data used to assess water quality</b>	25 samples exceeded standard out of a total of 150 samples.
<b>Spatial representation</b>	1 station. Sampling location represents 50 yards on either side of the sampling location.
<b>Temporal representation</b>	Data collected between 1999 and August 2002.
<b>Data type</b>	Numerical data.
<b>Use of standard method</b>	Standard bacteriological methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	List for enterococcus.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited sufficient spatial and temporal coverage.</li> <li>3. Beneficial uses apply to the water body.</li> <li>4. Water quality standard used is applicable.</li> <li>5. Data are numerical.</li> <li>6. Standard methods were used.</li> <li>7. Other water body- or site-specific information including season and the age of the data were considered.</li> </ol> <p>An adequate number of water quality measurements exceeded the water quality standard. The staff confidence that standards were exceeded is high. List for total and fecal coliform</p>

## Region 8: Strawberry Creek

### Salinity, total dissolved solids

<b>Water Body</b>	Strawberry Creek
<b>Stressor/Media/Beneficial Use</b>	Salinity, total dissolved solids/Water/MUN, COLD WILD
<b>Data quality assessment. Extent to which data quality requirements met.</b>	Reviewed water quality data from Lake Hemet Municipal Water District. QA used by water district.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	WQOs.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	Insufficient data to make a determination.
<b>Data used to assess water quality</b>	Reviewed water quality data from Lake Hemet Municipal Water District.  Hardness: 4 samples with 0 exceeding the standard. Sodium: 4 samples with 4 exceeding the standard. Sulfate: 4 samples with 0 exceeding the standard. Chloride: 4 samples with 3 exceeding the standard. Total dissolved solids: 4 samples with 3 exceeding the standard.
<b>Spatial representation</b>	Insufficient data to make a determination.
<b>Temporal representation</b>	1997-2001.
<b>Data type</b>	Data are numeric values.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	Insufficient data to make a determination. More monitoring needed.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited insufficient spatial and temporal coverage.</li> </ol> <p>An inadequate amount of the water quality measurements are available to determine if the water quality standards are exceeded.</p>

## Region 8: Temescal Creek

### Metals

<b>Water Body</b>	Temescal Creek
<b>Stressor/Media/Beneficial Use</b>	Metals/Water/WARM, WILD, RARE
<b>Data quality assessment. Extent to which data quality requirements met.</b>	Reviewed water quality data from Orange County Water District. QA used by county.
<b>Linkage between measurement endpoint and beneficial use or standard</b>	WQOs.
<b>Utility of measure for judging if standards or uses are not attained</b>	Measurement can be compared to numerical standard directly.
<b>Water Body-specific Information</b>	Measurements were compared to hardness-adjusted standards.
<b>Data used to assess water quality</b>	<p>Reviewed water quality data from Orange County Water District.</p> <p>Arsenic: 4 sample with 0 exceeding standard.  Cadmium: 4 samples with 0 exceeding standard.  Copper: 4 samples with 0 exceeding standard.  Lead: 4 samples with 0 exceeding standard.  Nickel: 4 samples with 0 exceeding standard.  Selenium: 4 samples with 0 exceeding standard.  Zinc: 4 samples with 0 exceeding standard.</p>
<b>Spatial representation</b>	Insufficient data to make a determination.
<b>Temporal representation</b>	1997-2000.
<b>Data type</b>	Data are numeric values.
<b>Use of standard method</b>	Standard analytical methods.
<b>Potential Source(s) of Pollutant</b>	Unknown.
<b>Alternative Enforceable Program</b>	None.
<b>RWQCB Recommendation</b>	Insufficient data to make a determination. More monitoring needed.
<b>SWRCB Staff Recommendation</b>	<p>After reviewing the available data and information and the RWQCB documentation for this recommendation, SWRCB staff conclude that the water body should be placed on the Monitoring List because the data are inadequate to determine if applicable water quality standards are exceeded.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data is considered to be of adequate quality.</li> <li>2. The data exhibited insufficient spatial and temporal coverage.</li> </ol> <p>An inadequate amount of the water quality measurements are available to determine if the water quality standards are exceeded.</p>

# Reference List for Region 8

## **Staff Report**

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